POLYCOM®

Polycom® Digital Signage™ (PDS™) 2000 Server Getting Started Guide

1.0 | August 2010 | 3725-78600-002A2

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Patent Information

The accompanying product is protected by one or more U.S. and foreign patents and/or pending patent applications held by Polycom, Inc.

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Contents

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About Polycom Digital Signage

This chapter explains the Polycom Digital Signage architecture.

This chapter contains the following sections:

- Polycom Digital Signage Solution
- Architecture Overview
- Customer Support

Polycom Digital Signage Solution

The Polycom Digital Signage solution is a combination of powerful applications, including the following components:

Polycom Digital Signage Player

The Polycom Digital Signage Player is a powerful broadcast rendering engine that delivers the highest quality output with the highest level of reliability. Unlike simple video playback devices, the Polycom Digital Signage Player dynamically arranges and composes signage elements, objects or zones in real time to generate the final video output. This means individual content elements can be changed at any time, without requiring entire video segments to be re-rendered whenever a change is needed.

Polycom Digital Signage Server

The Polycom Digital Signage Server automatically distributes new content to remote locations and receives continuous status updates from all Polycom Digital Signage Players.

Polycom Digital Signage Remote Manager

The Polycom Digital Signage Remote Manager application works with the Polycom Digital Signage Server to enable administration of networks of players.

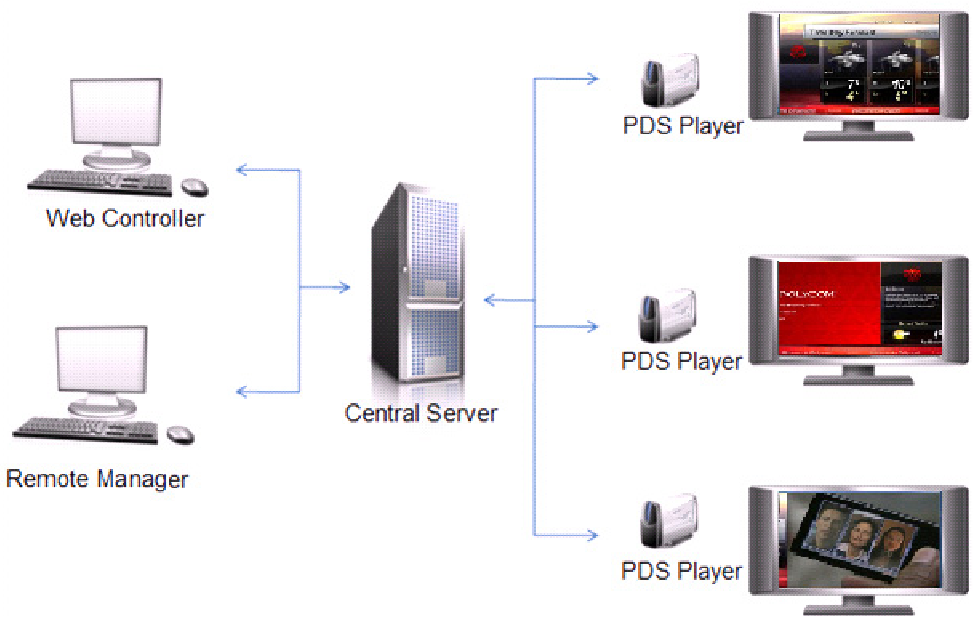
Polycom Digital Signage Web Controller

The Polycom Digital Signage Web Controller software lets users easily update and manage content on the Players in a Polycom Digital Signage network, with point-and-click simplicity.

Polycom Digital Signage Agent

The Polycom Digital Signage Agent software is the link between Players and the Server, enabling network status and health monitoring.

Architecture Overview



The image above presents an overview of the Polycom Digital Signage solution, depicting the overarching architecture for the various components of the solution. Content, in the form of templates, assets, and playlists, is created, assembled and managed using the Polycom Digital Signage Web Controller. Users can easily update content using the Web Controller's point-and-click interface.

The content is automatically distributed to Polycom Digital Signage Players via the Polycom Digital Signage Server, which acts as the central hub for the Polycom Digital Signage system.

The Polycom Digital Signage Player renders content in real time for display to a monitor, with the Polycom Digital Signage Agent linking Players to the Server. The Polycom Digital Signage Agent also monitors the status of the Polycom Digital Signage Player, and sends regular heartbeat and status messages to the Polycom Digital Signage Server. The Agent can also take steps to "heal" the Player if it detects a problem.

Administrators monitor and manage the system using the Polycom Digital Signage Remote Manager application. This software displays the status and details of all the Players connected to the system.

Administrators can also use the Polycom Digital Signage Remote Manager to distribute and manage content packages, as well as issue commands to individual players or groups of players, although content updates and distribution are typically handled via the Polycom Digital Signage Web Controller.

The Web Controller is used for day-to-day updates to content appearing on the monitors in a given Polycom Digital Signage network.

Customer Support

Recognizing that technology alone cannot solve today’s complex challenges, Polycom Global Services provides the industry’s best technical support staff and programs to let you concentrate on the task at hand. Polycom users can select from a variety of support solutions to obtain the level of support that best meets their needs.

Before contacting your Polycom Global Services representative for technical assistance, gather as much information as possible about your situation. Any information you can provide helps us assess the problem and develop an appropriate solution.

Polycom Global Services Telephone

If you have comments or questions about Polycom or if you need technical assistance, contact:

- Polycom Global Services in U.S.A. 888-248-4143

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Polycom Digital Signage Server Hardware Setup

This chapter explains how to set up the Polycom Digital Signage (PDS) Server as part of the Polycom Digital Signage solution. This chapter includes the following sections:

- Hardware Installation Procedures
- Safety Notice and Warnings
- Ratings
- Electrical and General Safety Guidelines
- Unpacking the Appliance
- Site Preparation
- Rack Installation
- Rear Panel Connections
- Front Panel Operation

Hardware Installation Procedures

To configure the PDS Server appliance as part of the Polycom Digital Signage solution, you must have a:

- PC to initialize and configure the PDS Server appliance.
- Ethernet cable to connect the PC to the PDS Server appliance.

Safety Notice and Warnings

Environmental Warning

Perchlorate Material - special handling may apply.

See www.dtsc.ca.gov/hazardouswaste/perchlorate.

This notice is required by California Code of Regulations, Title 22, Division 4.5, Chapter 33: Best Management Practices for Perchlorate Materials. This product/part includes a battery that contains Perchlorate material.

Ratings

V: 100 - 240 VAC (auto-range)

Hz: 60/50

A: 4.0

Electrical and General Safety Guidelines

CAUTION

This appliance is intended for installation in restricted areas only. Initial setup and maintenance should be performed by qualified personnel.

CAUTION

Power down the appliance following the operating system's proper power down procedure from the front panel. Unplug all AC power cord(s) before servicing.

CAUTION

To avoid electrical shock, check the power cords as follows.

- This product is to be installed in Restricted Access Location only.
- Use the exact type of power cords required.
- Use power cord(s) that came with safety certifications.
- Power cord(s) must comply with AC voltage requirements in your region.
- The power cord plug cap must have an electrical current rating that is at least 125% of the electrical current rating of this product.
- The power cord plug cap that plugs into the AC receptacle on the power supply must be an IEC 320, sheet C13, type female connector.
- Plug the power cord(s) into a socket that is properly grounded before turning on the power.

CAUTION

Required operating conditions for the appliance are -

- Temperature: 10 to 35 degrees C.
- Humidity, non-condensing: 8 to 90%.

CAUTION

Risk of explosion if the battery is installed upside down or is replaced by an incorrect type.

- Dispose of used batteries according to the instructions.

Disposing of Battery Backup Units - If Applicable

WARNING

If the BBU is damaged in any way, toxic chemicals may be released. The material in the battery pack contains heavy metals that can contaminate the environment. Federal, state, and local regulations prohibit the disposal of rechargeable batteries in public landfills.

Be sure to recycle the old battery packs properly. Comply with all applicable battery disposal and hazardous material handling laws and regulations in the country or other jurisdiction where you are using the BBU.

WARNING

There is danger of an explosion if the battery is incorrectly replaced. Replace it only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

WARNING

Disconnect the power supply at the circuit breaker before accessing any components. Turning off the system power supply switch does not reduce the risk of electrical shock from the power supply terminal block.

CAUTION

- To prevent the unit from overheating, never install the appliance in an enclosed area that is not properly ventilated or cooled. For proper airflow, keep the front and back sides of the appliance clear of obstructions and away from the exhaust of other equipment.
- Be aware of the locations of the power switches on the chassis and in the room, so you can disconnect the power supply if an accident occurs.
- Take extra precautionary measures when working with high voltage components. Do not work alone.
- Before removing or installing main system components, be sure to disconnect the power first. Turn off the system before you disconnect the power supply.
- Use only one hand when working with powered-on electrical equipment to avoid possible electrical shock.
- Use rubber mats specifically designed as electrical insulators when working with computer systems.
- The power supply or power cord must include a grounding plug and must be plugged into grounded outlets.

CAUTION

Electric Static Discharge (ESD) can damage electronic components. To prevent damage to your system board, it is important to handle it very carefully. The following measures can prevent ESD damage to critical components.

- Use a grounded wrist strap designed to prevent static discharge.
- Keep all components and printed circuit boards (PCBs) in their antistatic bags until ready for use.
- Touch a grounded metal object before removing the board from the antistatic bag.
- Do not let components or PCBs come into contact with your clothing, which may retain a charge even if you are wearing a wrist strap.
- Handle a board by its edges only; do not touch its components, peripheral chips, memory modules or contacts.
- When handling chips or modules, avoid touching their pins.
- Put the motherboard and peripherals back into their antistatic bags when not in use.
- For grounding purposes, make sure your computer chassis provides excellent conductivity between the power supply, the case, the mounting fasteners and the motherboard.

Unpacking the Appliance

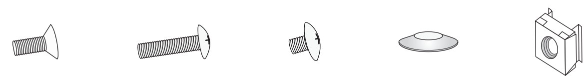
Before you begin

- Place the PDS Server appliance on a stable flat surface in the selected location.

Verify that the ship kit includes the following for installing the appliance in your rack:

- Two power cords
- Screws, cone washers and cage nuts (shown below)
- 4-post and/or 2-post rack rail bracket assemblies

Hardware Kit: screws, cone washers, and cage nuts (from left to right)



- 8 (Eight) M5 x 12 flat head screws
- 2 (Two) 10-32 x 3/4” pan head screws
- 22 (Twenty-two) M4 x 4 truss head screws
- 8 (Eight) M5 x 12 cone washers
- 10 (Ten) M5 Cage nuts

NOTE: Use the hardware supplied with your specific rack if different from the hardware supplied in this kit.

The 4-post rack assembly consists of:

- A set of long, fixed rack brackets that attach directly to the rack itself.
- A set of medium-sized adjustable rack brackets that attach to the long, fixed rack brackets.

The 2-post rack assembly consists of:

- A set of long, fixed rack brackets.
- Three sets of short rack brackets that attach to the long fixed rack brackets. One of these sets has threaded holes (for placement in the front) to allow the appliance to be secured in the rack.

Site Preparation

Setup location, rack and appliance precautions

- **Elevated Operating Ambient** - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

Always keep the rack's front door and all panels and components on the appliances closed when not servicing to maintain proper cooling.

- **Reduced Air Flow** - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised. Leave enough clearance, approximately 25 inches in the front, and 30 inches in the back of the rack to enable you to access appliance components and allow for sufficient air flow.
- **Mechanical Loading** - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

  All racks must be mounted securely. Ensure that all leveling jacks or stabilizers are properly attached to the rack. If installing multiple appliances in a rack, make sure the overall loading for each branch circuit does not exceed the rated capacity.

  Do not slide more than one appliance out from the rack at a time. Extending more than one appliance at a time may result in the rack becoming unstable. Install your appliance in the lower part of the rack because of its weight and also for ease in accessing appliance components.
- **Circuit Overloading** - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- **Reliable Earthing** - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

  Install near appropriate AC outlets, and Ethernet hubs or individual jacks. Be sure to install an AC Power Disconnect for the entire rack assembly. The Power Disconnect must be clearly marked.Ground the rack assembly properly to avoid electrical shock.

Rack Installation

4-Post Rack Installation

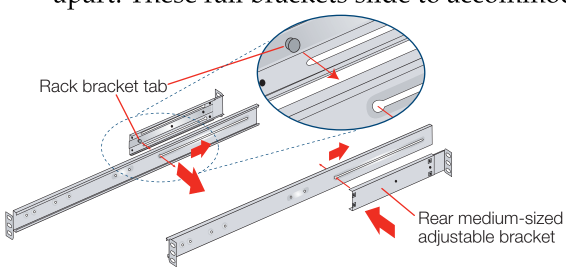
Unpack the appliance and locate the mounting hardware.

NOTE: The following installation procedures for are for use with the rails and hardware provided in your ship kit. If different style rails are being used, or if your rack requires different hardware, refer to the instructions provided with your rail or rack ship kit.

NOTE: When removing the appliance from the 4-post rack, you will need to press down on the right locking tab and lift up on the left locking tab in order to release it from the rack. Carefully slide it out supporting the unit on both sides at all times.

Step 1

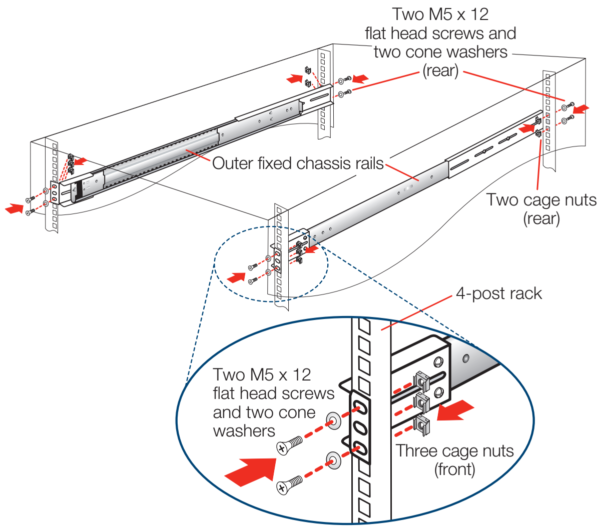
- Locate the two rack rail brackets that came in your ship kit.
- Attach the medium-sized adjustable rack bracket to the longer fixed rack bracket as shown.
- Insert the tab on the rear of the medium adjustable rack bracket through the larger round opening on the back end of the long fixed rack bracket and slide the long bracket forward to keep the two brackets from coming apart. These rail brackets slide to accommodate different rack depths.



Step 2

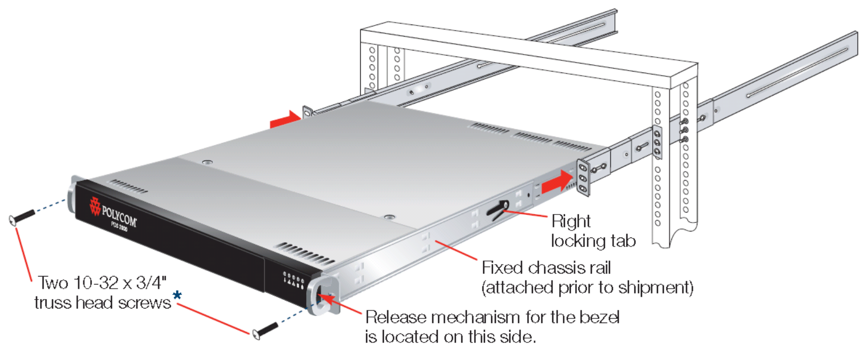
- Insert a cage nut into each of the square holes in the rack you will be using as shown (three in the front and two in the rear). They click into place.
- Attach the rack /rail assemblies to the rack using two M5 x 12 flat head screws and cone washers in the front and back. The convex side of the cone washers face toward the rack.

- Make sure the rack / rail assemblies and screws are aligned in the rack not only in the front and back, but are level in height on the left and right sides for proper alignment for appliance installation.



Step 3

- Align the fixed chassis rails on the appliance with the fixed rack rail brackets installed in the rack.
- Carefully slide the appliance into the rack until you hear the locking tabs on each side of the fixed front rails click into place.
- Push the appliance all the way into the rack until it stops.
- Sefcure the unit in the rack using a 10-32 x 3/4" truss head screw (and a cage nut if not already installed) in the center hole on each rail.



2-Post Rack Installation

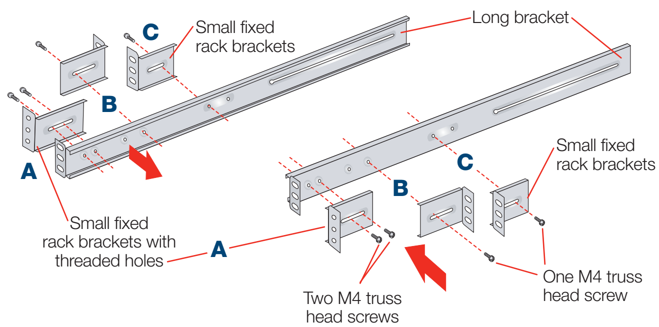
Unpack the appliance and locate the mounting hardware.

NOTE: The following installation procedures are for use with the rails and hardware provided in your ship kit. If different style rails are being used, or if your rack requires different hardware, refer to the instructions provided with your rail or rack ship kit.

NOTE: When removing the appliance from the 2-post rack, you will need to press down on the right locking tab and lift up on the left locking tab in order to release it from the rack. Carefully slide it out supporting the unit on both sides at all times.

Step 1

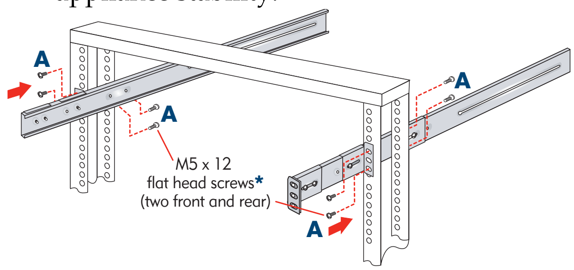
- Locate the two long and six short rack brackets that came in your ship kit.
- Securely attach the set of short brackets with the threaded screw holes to the long bracket in the front as shown. Use two M4 truss head screws for each bracket.
- Loosely attach one set of the other short brackets to the long fixed bracket as shown using one M4 truss head screw on each bracket. The three holes on the flap will face toward the back for later attachment to the 2-post rack.
- Loosely attach the remaining set of short brackets to the long fixed bracket as shown using one M4 truss head screw on each bracket. The three holes on the flap will face toward the front for later attachment to the 2-post rack.

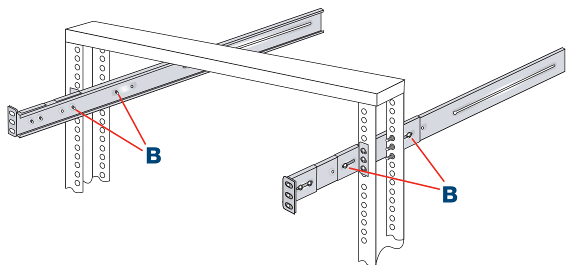


Step 2

- Attach the assembled brackets to the 2-post rack.
- Insert two M5 x 12 flat head screws through the short brackets into the 2-post rack (in the front and back of therack as shown) and tighten. Make sure the brackets are aligned and level in height, not only in the front and back but also on the left and right sides.

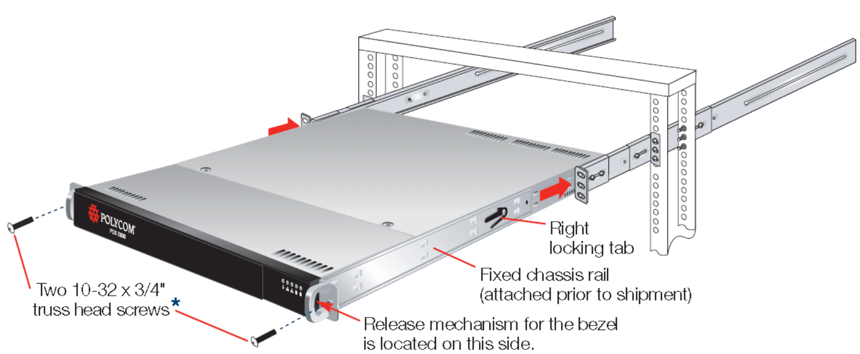
- Tighten each of the the single screws on the small fixed brackets (located on either side of the rack) to secure the brackets in the rack and ensure appliance stability.



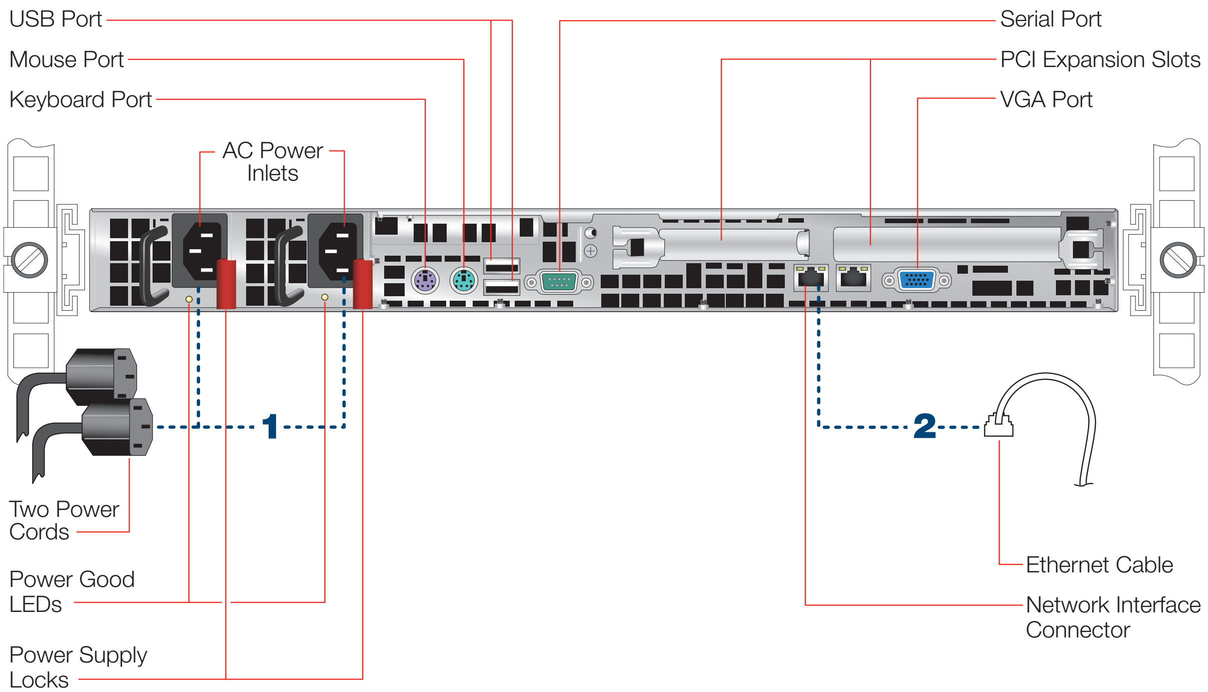


Step 3

- Align the fixed chassis rails on the appliance with the fixed rack rail brackets installed in the rack.
- Carefully slide the appliance into the rack until you hear the locking tabs on each side of the fixed front rails click into place.
- Push the appliance all the way back into the rack until it stops. Secure the unit in the rack using a 10-32 x 3/4" truss head screw in the center hole on each rail.



Rear Panel Connections



Connect Cables

1 Connect the power cords.

2 Connect the Ethernet cable to port 1.

3 Connect any other required cables.

NOTE: Both power cords need to be plugged into the appliance. If they are not both plugged in there is an alarm that sounds providing an alert that there is an issue with the unit

Front Panel Operation



- Power on the appliance.
- Remove the front bezel by pressing in on the right side of the bezel to release it.
- To power the appliance on, press the power button located on the far right on the front side of the appliance.
- Once the system has been powered on, replace the bezel.

3

Polycom Digital Signage Server Software Setup

This chapter explains the startup process for the Polycom Digital Signage Server and network configuration via the Polycom Digital Signage Remote Manager.

This chapter contains the following sections:

Polycom Digital Signage Server Setup

Upon completing the steps detailed in the previous chapter, you will need to conduct a brief setup procedure.

1 Ensure that the monitor, mouse, and keyboard are attached, and that the Polycom Digital Signage Server is attached to the network.
2 Power on the Polycom Digital Signage Server.
3 A login screen will appear after startup. Log into Polycom Digital Signage Server with the default credentials Administrator/Polycom123.
4 Launch the Windows licensing dialog. Enter the Windows product key, located on the Microsoft sticker on top of the server.

Server setup should now be complete. For information on changes to the PDS Server via the PDS Server's native configuration service, please consult the *Polycom Digital Signage Administrator Guide*.

All other configuration processes are managed through the Remote Manager and individual Player appliances. The Remote Manager connection process will confirm that the server is online and functioning properly.

Installing Remote Manager

The Remote Manager is used to administer networks of Polycom Digital Signage Servers and Players from a third party desktop computer.

Remote Manager is supported on Windows XP, Windows Vista (32 bit), and Windows 7 (32 bit). Windows Vista and Windows 7 require the additional pre-installation steps outlined below.

For more information on the Polycom Digital Signage Remote Manager, please consult the *Polycom Digital Signage Administrator Guide.*

Pre-Installation Procedures on Windows Vista and Windows 7

1 Open the **Start** menu. Type **MSconfig** in the Search field and click enter. The System Configuration window will open.
2 Go to the **Tools** tab.
3 Select the option **Disable UAC** under the "Tool Name" column.
4 Click **Launch**.
5 Restart the computer.
6 Perform the installation steps detailed below.

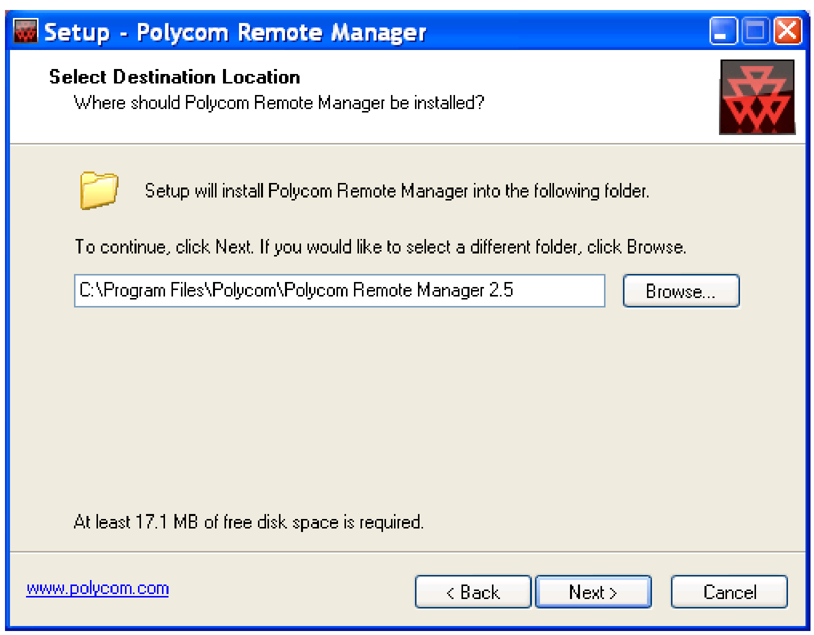
Installation

1 Find the Polycom Digital Signage Remote Manager installer in the C:\software directory on the Polycom Digital Signage Server.
2 Install the Polycom Digital Signage Remote Manager from the installation .exe file on a PC that has access to the PDS Server and to the Internet.

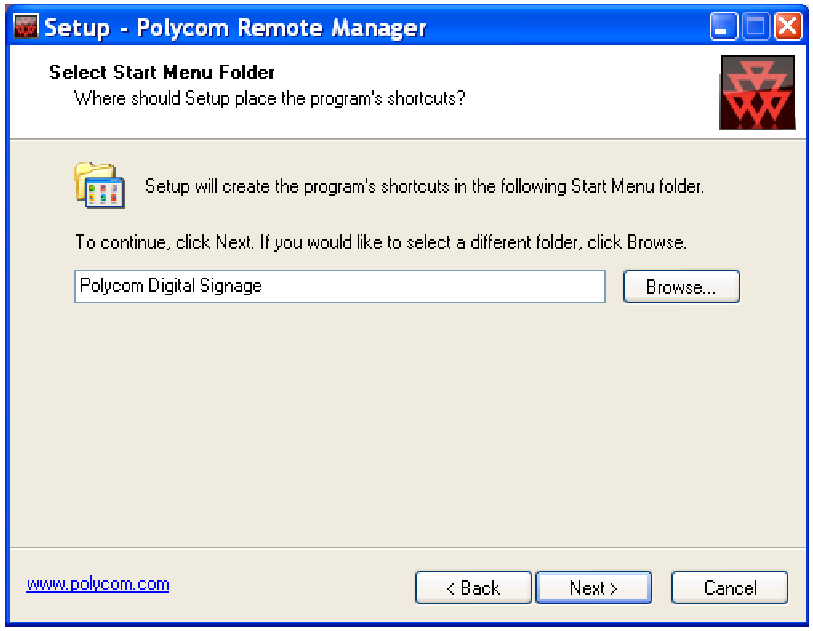
3 The setup wizard will appear. Click **Next**.



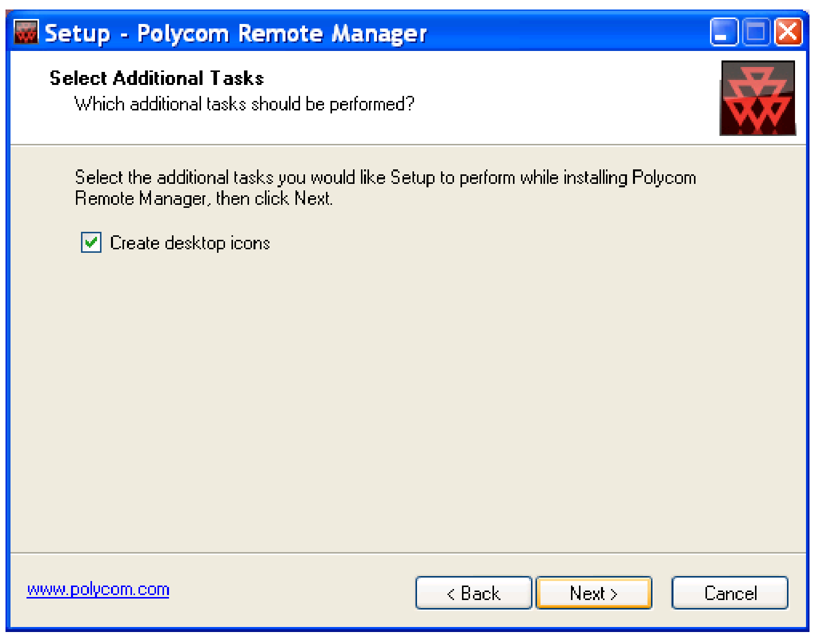
4 The Select Destination Location window will appear. If you wish to install the Remote Manager to a specific directory, provide a new pathway or click **Browse**; otherwise, click **Next.**.



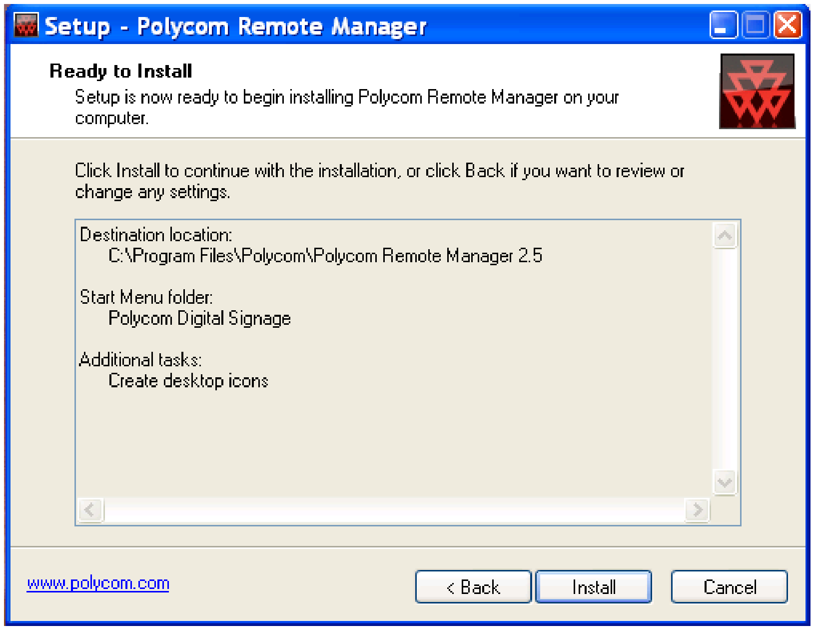
5 Provide a point in the Start Menu for the Remote Manager shortcut. Click **Next**.



6 Choose whether to **Create Desktop Icons** and click **Next.**



7 A summary screen will appear. Click **Install**.



Starting the Remote Manager

The Remote Manager can be used to confirm that the server is online.

1 Start Remote Manager. You will be prompted for a license key.

a In the dialog, click the **Request a License Key** button.

b Enter the **PDS Serial Number**. Contact Polycom Support to obtain this number.

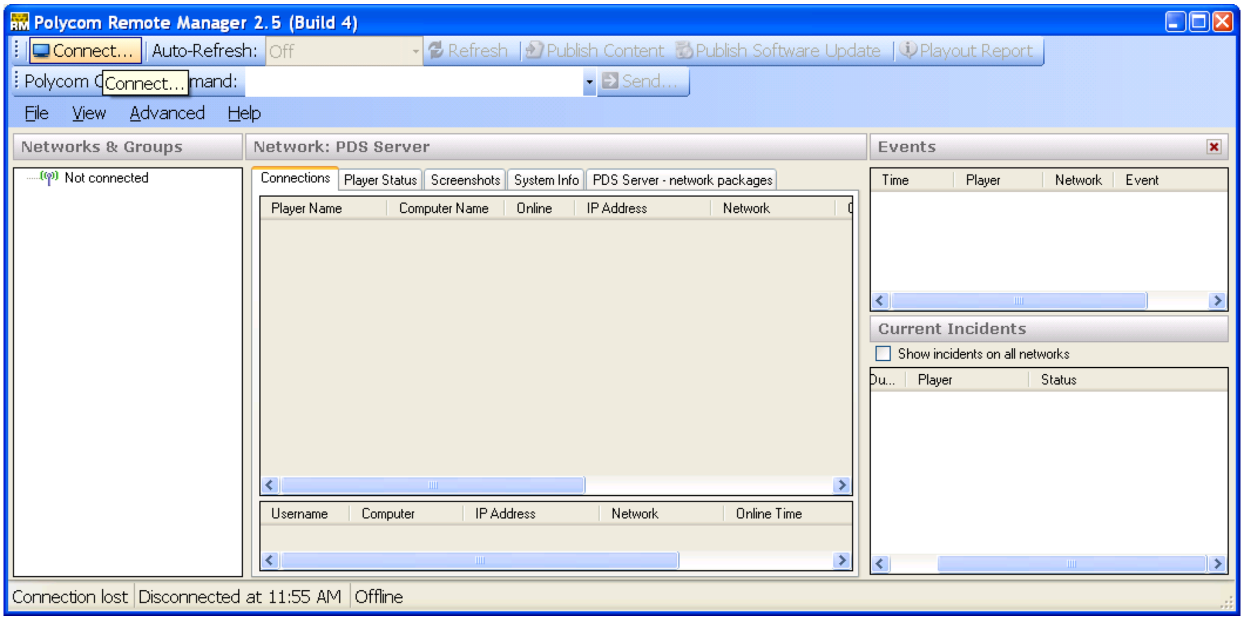
The PDS Serial Number is unique per customer and comprehensive across the Polycom Digital Signage solution. Do not discard this number.

c Click **Request Key** to request the license key which will automatically populate the license key in the initial dialog.

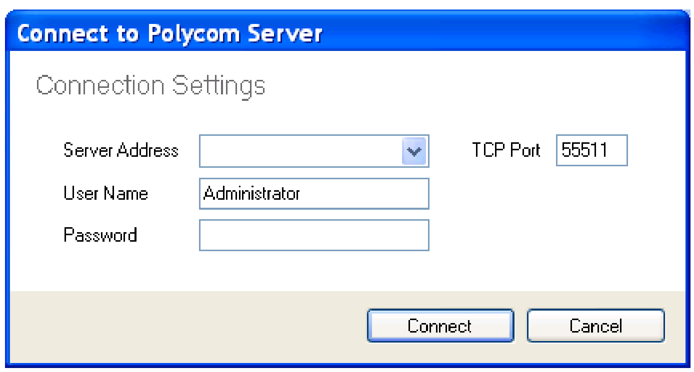
NOTE: Users operating in a secure environment without Internet access will need to contact Polycom Support in order to receive their License Key.

d Click **OK** to register your product.

The Remote Manager will then appear.



2 Click the **Connect** button in the upper left hand corner of Remote Manager. The Connect to Polycom Server pop-up appears.



a Enter the name or IP address of the Polycom Digital Signage Server. The name will be PDSSERVER by default.

b Enter the login credentials, which by default will be Administrator/Polycom123.

c Click **Connect**.

3 Verify that you are able to connect to the Polycom Digital Signage Server.

4 For information on setting up and starting the Polycom Digital Signage Player, consult the *Polycom Digital Signage Player Getting Started Guide.* For information on the using the Player or starting a new Polycom Digital Signage Network with an existing Server, consult the *Polycom Digital Signage Player Administrator Guide*.

A

Regulatory Notices

Regulatory Notices

USA Regulatory Notices

Part 15 FCC Rules

This device is compliant with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1 This device may not cause harmful interference, and

2 This device must accept any interferences received, including interference that may cause undesired operation.

Class A Digital Device or Peripheral

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

In accordance with part 15 of the FCC rules, the user is cautioned that any changes or modifications not expressly approved by Polycom Inc. could void the user's authority to operate the equipment.

We recommend that you install an AC surge arrestor in the AC outlet to which this device is connected. This action will help to avoid damage to the equipment caused by local lightning strikes and other electrical surges.

Czech Republic Regulatory Notices

This device belongs to Class B devices as described in EN 55022, unless it is specifically stated that it is a Class A device on the specification label. The following applies to devices in Class A of EN 55022 (radius of protection up to 30 meters). The user of the device is obliged to take all steps necessary to remove sources of interference to telecommunication or other devices.

Pokud není na typovém štitku počítače uvedeno, že spadá do třídy A podle EN 55022, spadá automaticky do třídy B podle EN 55022. Pro zařízení zařazená do třídy A (ochranné pásmo 30m) podle EN 55022 platí následující. Dojde−li k rušení telekomunikačních nebo jinych zařízení, je uživatel povinen provést taková opatření, aby rušení odstranil.

Regulatory Notices

Canadian Regulatory Notices

Class A Digital Device

This Class [A] digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [A] est conforme à la norme NMB-003 du Canada.

EEA Regulatory Notices

This Polycom Digital Signage Server has been marked with the CE mark. This mark indicates compliance with EEC Directives 2006/95/EC and 2004/108/EC. A full copy of the Declaration of Conformity can be obtained from Polycom Ltd, 270 Bath Road, Slough, Berkshire, SL1 4DX, UK.

Japanese Regulatory Notices

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＡ情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Worldwide Regulatory Notices

Warning

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Plugs Acts as Disconnect Device

The socket outlet to which this apparatus is connected must be installed near the equipment and must always be readily accessible.

La prise électrique à laquelle l’appareil est branché doit être installée près de l’équipement et doit toujours être facilement accessible.

Installation Instructions

Installation must be performed in accordance with all relevant national wiring rules.

L’Installation doit être exécutée conformément à tous les règlements nationaux applicable au filage électrique.

P/N: 509-3535-01 **REV:** 0B